

AMENDMENTS TO THE DRAWINGS

Attached hereto are two (2) sheet(s) of correct formal drawings that comply with the provisions of 37 C.F.R. § 1.84. The corrected formal drawings incorporate the following drawing changes:

FIGS. 2 and 3: Elements 24a and 24b have been amended as requested by the Examiner to show the requested clearances.

It is respectfully requested that the corrected formal drawings be approved and made a part of the record of the above-identified application.

REMARKS

Applicants appreciate the Examiner's thorough consideration provided in the present application. Claims 1-8, 12-16 and 19-23 are currently pending in the instant application. No claims have been amended by way of this response. Claims 1, 5, 7, 12, 19 and 22 are independent. Reconsideration of the present application is earnestly solicited.

Allowable Subject Matter

Applicants appreciate the Examiner's indication of allowable subject matter. Specifically, claims 12-15 and 19-23 have been allowed by the Examiner. As described in greater detail hereinafter, Applicants submit that the remaining claims should also be allowed and the present application should be passed to Issue.

Reasons for Entry of Amendment

As discussed in greater detail hereinafter, Applicants respectfully submit that the rejections under 35 U.S.C. § 102 are improper and should be withdrawn. If the present application is not passed to Issue, Applicants submit

that the finality of the Final Office Action mailed on October 3, 2003 should be withdrawn.

Oath/Declaration

Applicants appreciate the Examiner's indication of a defective declaration. Applicants submit that it appears the Examiner may be referring to the changes to the address under inventor Jason A. Kay on page 3 of the Declaration. Accordingly, Applicants will prepare and submit a substitute declaration in accordance with 37 CFR 1.67 resubmitting the proper mailing address and signature for this inventor. If additional or alternative changes are required by the Examiner, Applicants respectfully request that the Examiner contact the undersigned via telephone in the Washington, DC area.

Drawings

Applicants appreciate the Examiner's approval of the drawing corrections filed on July 18, 2003. Applicants have submitted two (2) sheets formal drawings incorporating the changes to FIGs. 2 and 3 approved by the Examiner as an attachment to this response. Accordingly, no further action by Applicants is required with respect to the drawings.

Claim Rejections Under 35 U.S.C. § 102

Claim 5 have been rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Doty (U.S. Patent No. 3,293,018). This rejection is respectfully traversed.

Applicants submit that the prior art of record fails to teach or suggest each and every limitation of the unique combination of elements of the claimed invention. Accordingly, this rejection should be withdrawn.

With respect to claim 5, Applicants submit that the prior art of record fails to teach or suggest the unique combination of elements of the claimed invention, including the limitation(s) of "an internal mold having an exterior surface for supporting and shaping the inner surface of the selected end region of the tube when the tube is rendered malleable; an insertion device for inserting said internal mold within said selected end region of the tube, prior to the application of heat to the tube, *wherein said insertion device includes a sleeve or a handle; and a multi-part, exterior mold having a first exterior mold piece and a second exterior mold piece* for compressing the exterior surface of the selected end region of the tube and for shaping the exterior surface of the selected end region of the tube when rendered malleable, and for, concurrently causing the shape of the inner surface of the selected end region of the tube to

conform to the exterior surface of the internal mold.” (emphasis added in italicized print) Accordingly, this rejection should be withdrawn.

With respect to claim 5, the Examiner has indicated that “there doesn’t appear to be any indication what specific part of the combination is missing. However, it is further argued that one of ordinary skill in the art would not interpret the paddle of Doty to read on the claim invention. No rationale or evidence is used to support this. So, Examiner cannot agree an argument based only on assertion.” Applicants respectfully submit that anticipation under 35 U.S.C. § 102 clearly requires that the reference teach or suggest every limitation of the claimed invention. Element 23 relied upon by the Examiner is clearly not a *multi-part* exterior mold. Therefore, this rejection must be withdrawn.

Applicants submit that the missing features of the claimed invention were and once have again have been specifically shown in italicized print for the benefit of the Examiner. In order to expedite the prosecution of the present application, Applicants have identified those missing features in italicized-type to again show “what specific part of the combination is missing.”

The Examiner has alleged that Doty teaches an external mold, e.g., element 23 of the Doty reference. However, the Examiner is specifically

ignoring expressed claim language. As identified hereinabove and in Applicants previous response, Doty clearly does not teach or suggest the features of "*a multi-part, exterior mold having a first exterior mold piece and a second exterior mold piece* for compressing the exterior surface of the selected end region of the tube and for shaping the exterior surface of the selected end region of the tube when rendered malleable, and for, concurrently causing the shape of the inner surface of the selected end region of the tube to conform to the exterior surface of the internal mold."

The Examiner has not identified any *multi-part* exterior mold in the Doty reference, element 23 is clearly not a multi-part exterior mold, and element 23 clearly does not have *first and second exterior molding pieces* as claimed. Accordingly, this rejection should be withdrawn. The Examiner has relied upon elements 22 (and element 28) and 23 to allegedly show the internal and external mold of the claimed invention of claim 5, respectively. However, element 23 is clearly described and shown as a male element (FIG. 9 and col. 4, lines 15-52) that is not a multi-part element and clearly does not include any first exterior molding piece and any second exterior molding piece. As seen in FIG. 9 of Doty, element 23 is clearly a single element having only "one molding piece," if any. The Examiner is invited to review FIGs. 5(a)-7 of the present

application (particularly elements 22a and 22b) for support for and/or to better understand the concept of an exterior mold having two exterior molding pieces. Accordingly, this rejection should be withdrawn.

As to the dependent claims, Applicants respectfully submit that these claims are allowable due to their dependence upon an allowable independent claim, as well as for additional limitations provided by these claims.

Claim Rejections Under 35 U.S.C. § 103

Claims 1-4, 6-8 and 16 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Zauner (U.S. Patent No. 4,444,908) in view of Novini (U.S. Patent No. 4,095,204). This rejection is respectfully traversed.

In light of the foregoing amendments to the claims, Applicants submit that this rejection has been obviated and/or rendered moot. Applicants respectfully submit that Zauner and/or Novini fail to teach or suggest the unique combination of elements of the claimed invention. Therefore, this rejection should be withdrawn.

For example, the Examiner has acknowledged that Zauner fails to teach or suggest "an apparatus for shaping a selected end region of a hollow cylindrical glass tube used in the manufacture of optic fibers comprising. . .an

optical sensing device for sensing a physical condition of the tube.” In order to overcome this shortcoming, the Examiner has relied upon the alleged teachings of Novini. However, the Examiner has merely shown that optical sensing systems exist in the background art and has not provided any reason as to why one of ordinary skill in the art would include this feature within the same device that is used for shaping a selected end region of a hollow cylindrical glass tube used in the manufacture of optic fibers.

The Examiner is reminded that a rejection under 35 U.S.C. § 103(a) is improper if the Examiner merely shows that the prior can be modified to include or comprise all of the features of the claimed invention. A proper prima facie test requires that the Examiner show that it would have been obvious to include the additional features. In order to form a proper rejection under 35 U.S.C. § 103(a), the Examiner is required to point to actual teachings as to why one of ordinary skill in the art would add or modify the base reference to include the missing features. For example, the Examiner’s statement with respect to claim 1 that “It is clear that one *can* apply heat to the tube-well after the final device is made-*even if Zauner does not disclose it.*” (emphasis added, see page 4 of the Final Office Action dated October 3, 2003). This is improper.

The prior art must teach or suggest that one of ordinary skill in the art *would* have attempted to create the combination of elements of the claimed invention, not that it can be or could have been done as alleged by the Examiner.

The optical sensing system(s) identified by the Examiner are separate systems, even if found in a typical glassware manufacturing plant. In the claimed invention, an optical sensing device is provided within the same equipment used to shape and form the glass tube. In the prior art identified by the Examiner, the Examiner has merely shown that the concept of examining glassware for defects is already well known in the prior art. However, this issue is not been disputed. Instead, Applicants respectfully submit that the claimed invention offers a unique combination of elements that includes dual capability of glassware manufacture and visual inspection in the same device. This unique combination of features has not been shown anywhere in the prior art of record. Further, Novini does not suggest that this feature should or even could be added to the device of Zauner. Accordingly, Applicants respectfully submit that this rejection appears improper and should be withdrawn.

On page 5 of the Final Office Action, the Examiner indicates that the claimed invention does not include an optical sensing device "within" the same

equipment used to shape and form the tube. In response, Applicants have claimed a single apparatus that includes or comprises a combination of limitations. For example, with respect to claim 1, these elements are all contained within a single apparatus. The Examiner's statement that "the claims do not require that the optical sensing device be 'within' the same equipment used to shape and form the tube. Therefore the Office need not demonstrate any reason for using a sensor within the shaping device" is improper. This position is respectfully traversed. Applicants have claimed a single apparatus having an optical sensing device, therefore, the Examiner is required to show this combination of features in the prior art of record.

The Examiner is required to teach or suggest the combination of limitations of the claimed invention, and is not permitted to simply provide a piecemeal reconstruction of the prior art of record, i.e., without providing "any reason for using a sensor within the shaping device." The Examiner has identified that Zauner does not teach or suggest the claimed optical sensing device. Novini does teach or suggest including an optical sensing device within a molding apparatus, i.e., as in the claimed invention that claims a single apparatus having a combination of limitations, including an optical sensing device.

In accordance with the above discussion of the patents relied upon by the Examiner, Applicants respectfully submit that these documents, either in combination together or standing alone, fail to teach or suggest the invention as is set forth by the claims of the instant application.

Accordingly, reconsideration and withdrawal of the claim rejection are respectfully requested. Moreover, the Applicants respectfully submit that the instant application is in a condition for allowance.

CONCLUSION

Since the remaining patents cited by the Examiner have not been utilized to reject the claims, but rather to merely show the state-of-the-art, no further comments are necessary with respect thereto.

It is believed that a full and complete response has been made to the Office Action, and that as such, the Examiner is respectfully requested to send the application to Issue.

In the event there are any matters remaining in this application, the Examiner is invited to contact Matthew T. Shanley, Registration No. 47,074 at (703) 205-8000 in the Washington, D.C. area.